

*Exhibit E-3*

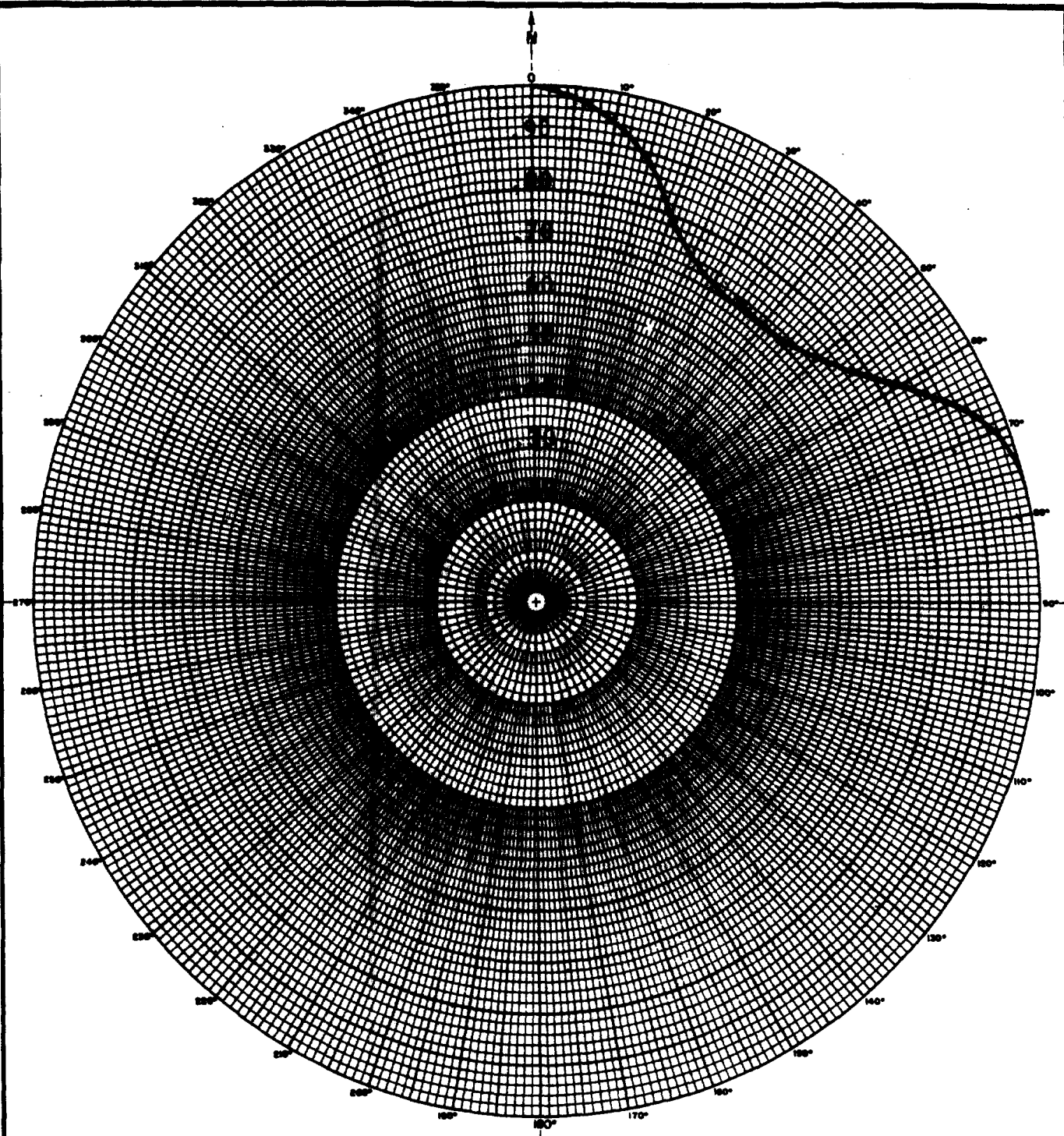
**Directional Antenna System Data**

The following exhibit consists of this and the following four pages which contain the required information for directional antenna systems. It should be noted that the maximum to minimum ratio on the proposed antenna system does not exceed 15 dB. The rate of change of the antenna pattern does not exceed 2 dB. per 10° of azimuth. In addition, neither the vertically nor the horizontally polarized components of the proposed antenna system radiation will exceed the value shown on the attached horizontal radiation pattern. It should be noted that the pattern proposed is an envelope which will contain all values of the actual measured pattern. Measurements will be performed at the manufacturer's test site to ensure that those pattern limitations are met.

The horizontal radiation pattern contained in this exhibit does not represent the actual pattern proposed but the limits which will be placed upon that pattern. Neither the vertically or horizontally polarized components will exceed the limits nor will the effective radiated power from the proposed facility exceed 50.0 kW at any value of azimuth

**Directional Antenna Characteristics**

1. The method of mounting on the tower will be coordinated with the antenna manufacturer, and will be totally in accordance with the antenna manufacturer's instructions as specified in Section 73.316 (c) (5) of the Commission's Rules and Regulations.
2. The antenna will not be mounted on the top of an antenna tower which includes a top-mounted platform larger than the nominal cross-section of the tower in the horizontal plane as specified in Section 73.316 (c) (6) of the Commission's Rules and Regulations.
3. No other antennas of any type will be mounted on the same tower level as the directional antenna. No antenna of any type will be mounted within the horizontal or vertical distance specified by the antenna manufacturer as necessary for proper directional operation in accordance with Section 73.316 (c) (7) of the Commission's Rules and Regulations.



HORIZONTAL RADIATION PATTERN

Plot of Relative Field

APPLICANT : Sharon A. Mayer

LOCATION : Milford, Iowa

FREQUENCY : Channel 271

POWER : 50 KW.

LATITUDE : 43 DEG. 24 MIN. 20 SEC.

LONGITUDE : 95 DEG. 05 MIN. 01 SEC.

WHEN USED :

R.M.S. FIELD: FM Directional

DATE : December, 1995

D. L. MARKLEY & ASSOC., INC.  
Consulting Engineers

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*Proposed FM Directional Antenna System*

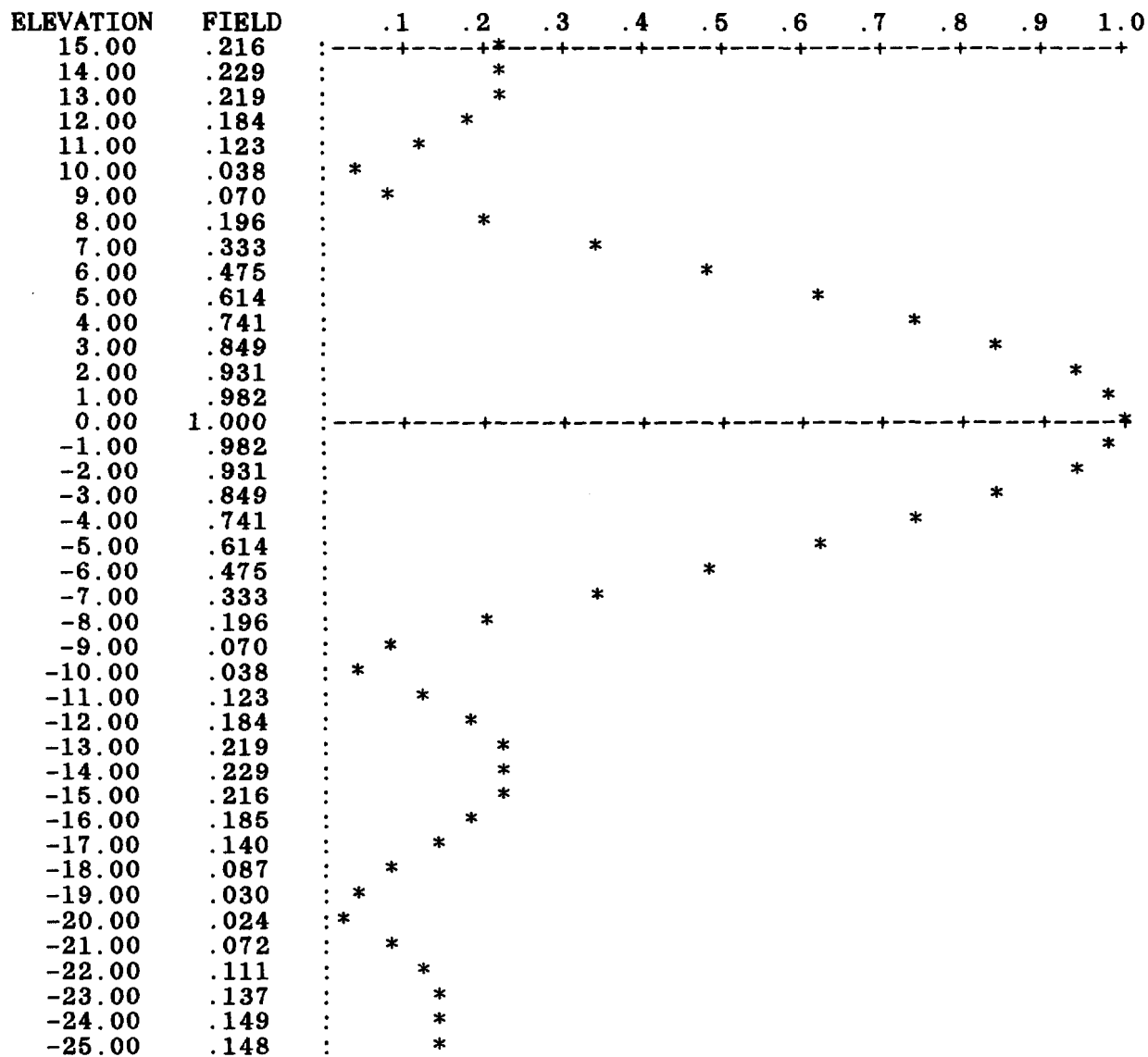

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**Maximum ERP****50.0 kilowatts**

Azimuth	Rel. Field	Rel Power	ERP (kw)	ERP (dBk)
000°	1.000	1.000	50.000	16.990
010°	0.940	0.884	44.180	16.452
020°	0.800	0.640	32.000	15.051
030°	0.720	0.518	25.920	14.136
040°	0.700	0.490	24.500	13.892
050°	0.740	0.548	27.380	14.374
060°	0.835	0.697	34.861	15.423
070°	0.970	0.941	47.045	16.725
080°	1.000	1.000	50.000	16.990
090°	1.000	1.000	50.000	16.990
100°	1.000	1.000	50.000	16.990
110°	1.000	1.000	50.000	16.990
120°	1.000	1.000	50.000	16.990
130°	1.000	1.000	50.000	16.990
140°	1.000	1.000	50.000	16.990
150°	1.000	1.000	50.000	16.990
160°	1.000	1.000	50.000	16.990
170°	1.000	1.000	50.000	16.990
180°	1.000	1.000	50.000	16.990
190°	1.000	1.000	50.000	16.990
200°	1.000	1.000	50.000	16.990
210°	1.000	1.000	50.000	16.990
220°	1.000	1.000	50.000	16.990
230°	1.000	1.000	50.000	16.990
240°	1.000	1.000	50.000	16.990
250°	1.000	1.000	50.000	16.990
260°	1.000	1.000	50.000	16.990
270°	1.000	1.000	50.000	16.990
280°	1.000	1.000	50.000	16.990
290°	1.000	1.000	50.000	16.990
300°	1.000	1.000	50.000	16.990
310°	1.000	1.000	50.000	16.990
320°	1.000	1.000	50.000	16.990
330°	1.000	1.000	50.000	16.990
340°	1.000	1.000	50.000	16.990
350°	1.000	1.000	50.000	16.990

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PROGRAM NO.  FMP
BEAM TILT=   0%
NULL FILL=   0%
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**FREQ: 102.1 mHz**



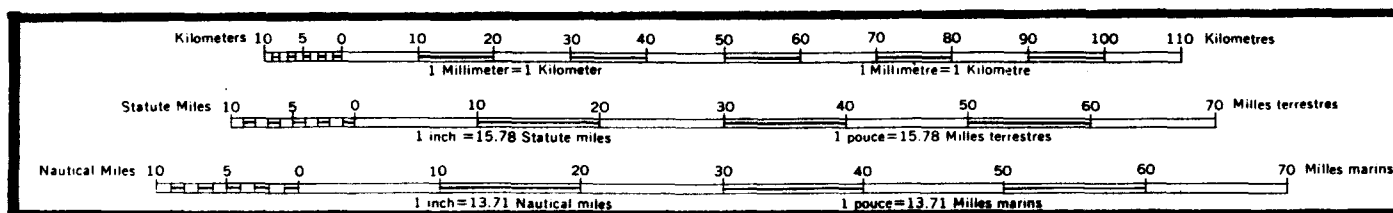
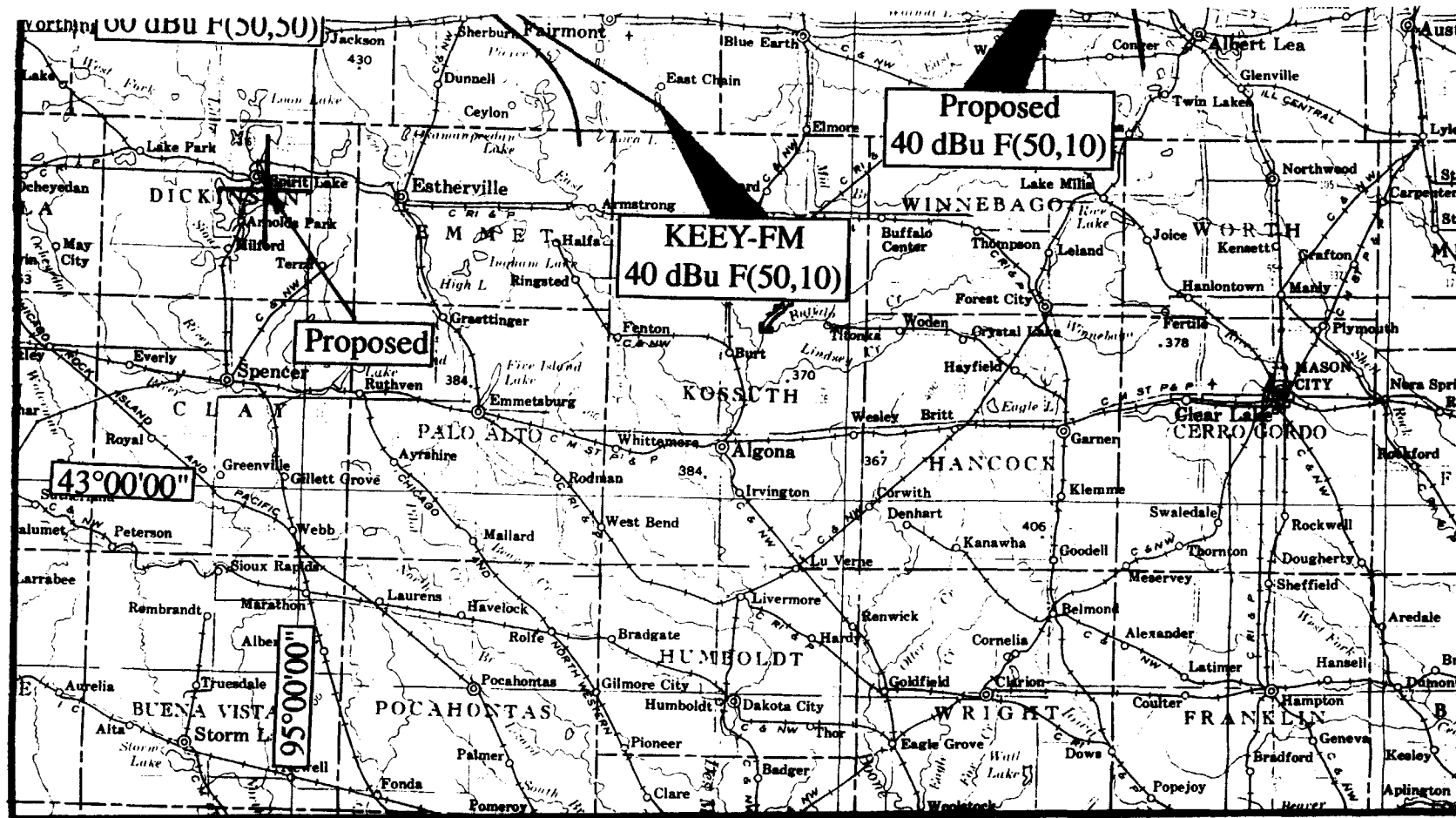
**EXHIBIT E-4****SHORT-SPACING STATEMENT**

The proposed facility would be slightly short-spaced to an existing FM station at St. Paul, Minnesota. This short-spacing is brought about by the effort of the applicant to minimize the environmental impact of the proposed station. To meet increasing concern in the area regarding additional towers, the applicant proposes to locate the facility on an existing broadcast station tower. While not initially thought to be a matter of concern, it now appears that zoning approval for an additional tower may be difficult to obtain. Rather than enter into a lengthy and expensive legal matter to obtain a building permit, the proponent simply proposes to co-locate with KUOO(FM). In this way, there will be no environmental impact at all from the proposed structure.

The attached drawing contains the interferring and protected contours for KEEY-FM and for the proposed Milford facility. It is respectfully submitted that this map satisfies the intent of the required exhibit. However, the protected and interferring contours in all directions from the proposed operation are not shown on this map in the interest of keeping the map at a reasonable size to

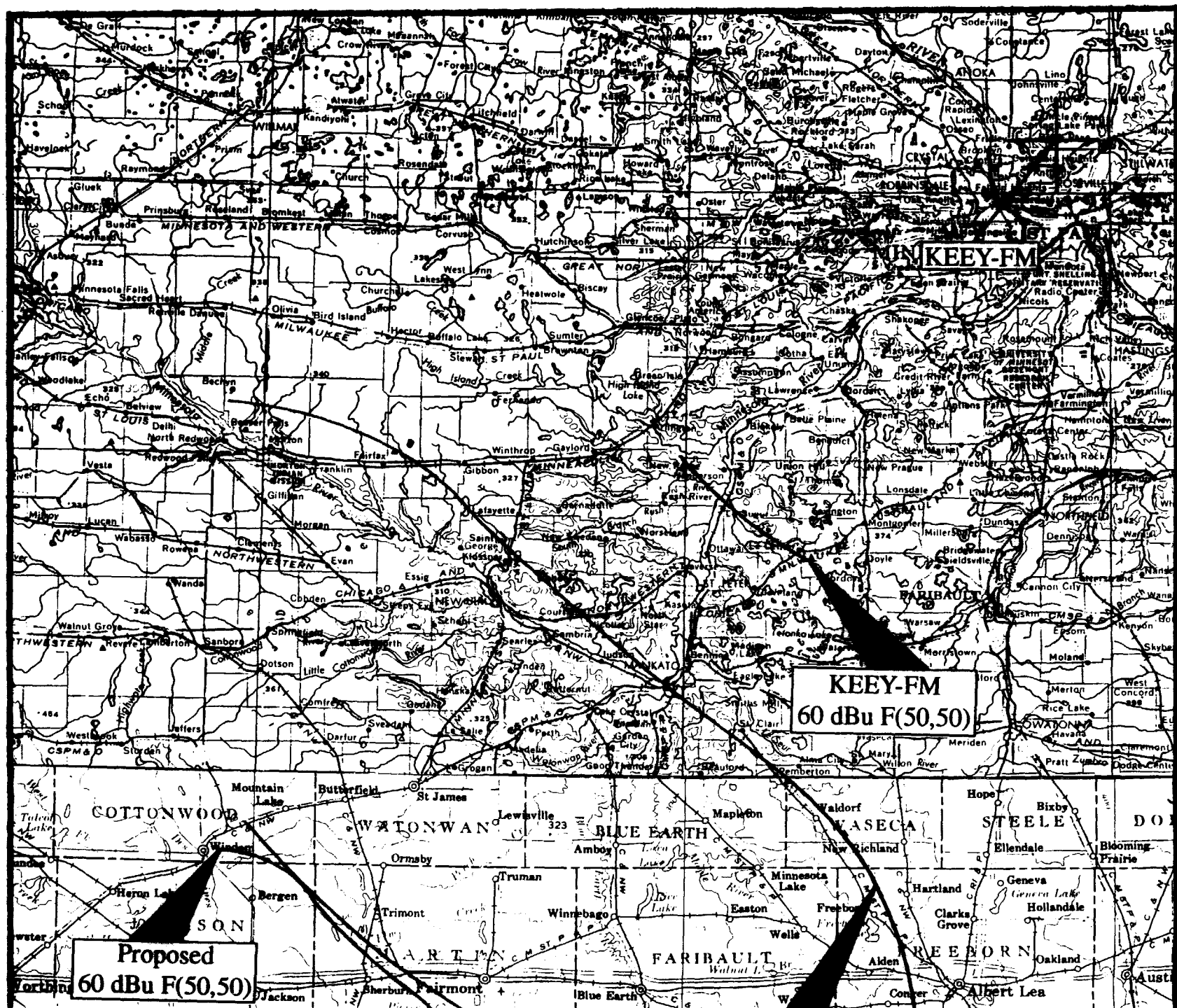
- 2 -

be contained in the report. It is believed that maintaining the drawing at the size utilized allows more detail to be shown while clearly demonstrating the location of the interferring and protected contours. In this instance, only the contours from the proposed facility toward the co-channel St. Paul station are of concern. There is no short-spacing to any other facilities.



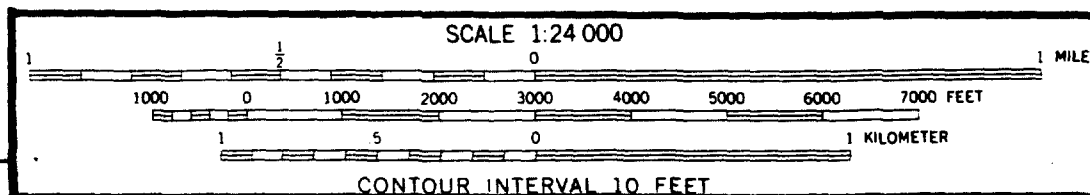
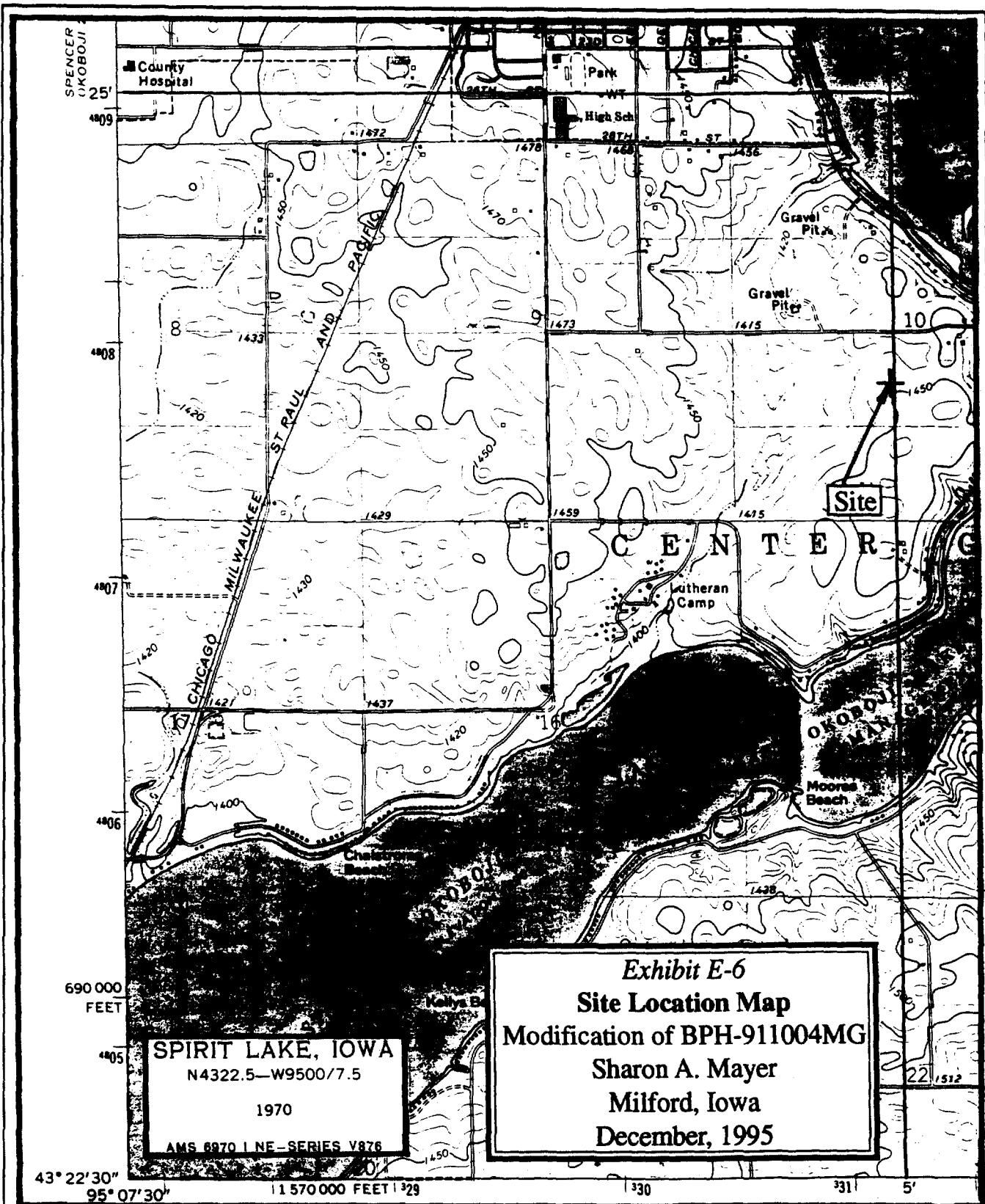
**Map Source:**  
**Minneapolis and Des Moines**  
**1:1,000,000**

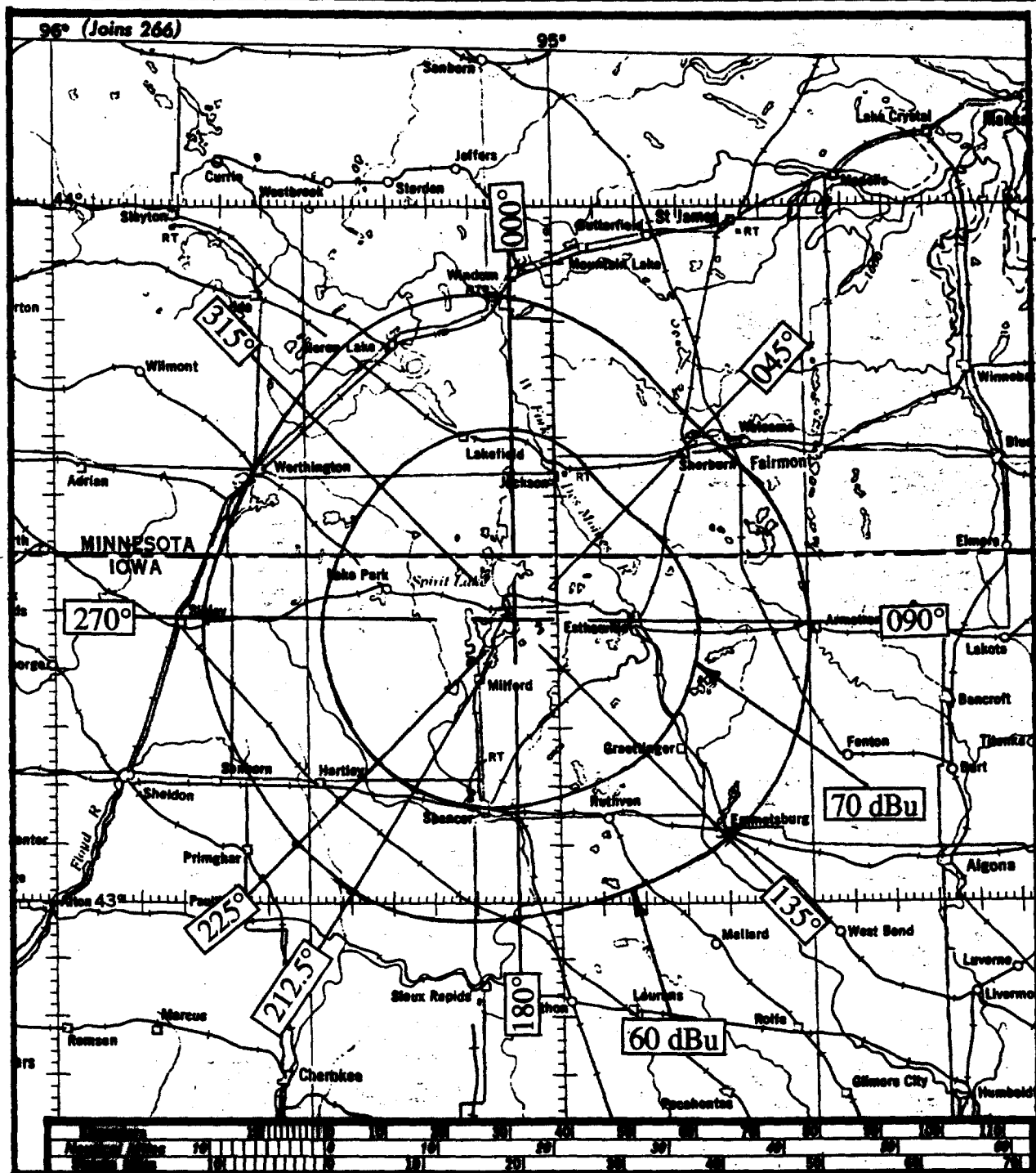
**Exhibit E-4**  
**Allocation Study**  
**Modification of BPH-911004MG**  
**Sharon A. Mayer**  
**Milford, Iowa**  
**December, 1995**



**EXHIBIT E-5****ELIMINATION OF ANY OBJECTIONAL INTERFERENCE**

The proposed station will share a tower with FM broadcast station KU00. In addition, the tower supports antennas used in the auxiliary broadcast service, cellular telephone service and business radio. It is not anticipated that any interaction between the proposed FM station and those facilities would occur which would be contrary to the Commission's Rules and Regulations. To ensure that such is the case, spectrum analysis measurements will be performed of all signals in the area of the tower both before and after the proposed FM station is placed into operation. If any prohibited signals are found to exist as a result of the proposed facility, they will be eliminated in the normal fashion through use of appropriate filters.





**Map Source:**  
**Platte River**  
**World Aeronautical Chart**

**Exhibit E-7**  
**Proposed Service Contours**  
**Modification of BPH-911004MG**  
**Sharon A. Mayer**  
**Milford, Iowa**  
**December, 1995**

Single Channel Study For: Milford, IA On Ch. 271 C2 -102.1 Mhz.

States Searched: IA,MN,ND,SD,NE  
Run Date: 12-18-1995

43° 24' 20" N.  
95° 05' 01" W.

CHANNEL	ALLOTMENT OR STATION	CLASS	CALCULATED - KM. (MI.)	REQUIRED KM.	BEARING Deg. T.
217	NO CONFLICT				
218	NO CONFLICT				
268	KAYL-FM LIC Storm Lake	IA C1	85.92( 53.39)	79	184.70
268	VACANT St. James	MN A	79.70( 49.52)	55	25.10
269	KAYL-FM APP Storm Lake	IA C1	85.92( 53.39)	79	184.70
269	VACANT Storm Lake	IA C1	85.92( 53.39)	79	184.70
270	USED Sioux Falls	SD C2	148.70( 92.40)	130	285.90
270	KTWB CP Sioux Falls	SD C2	150.84( 93.73)	130	285.40
270	KTWB LIC Sioux Falls	SD C2	150.84( 93.73)	130	285.40
271	NEW APP Milford	IA C2*	12.12( 7.53)	190	238.50
271	VACANT Milford	IA C2*	7.87( 4.89)	190	207.00
271	NEW APP Milford	IA C2*	8.87( 5.51)	190	249.80
271	KEEY-FM LIC St. Paul	MN C	*241.31(149.94)	249	39.70
271	USED St. Paul	MN C	*228.64(142.07)	249	40.30
272	KOOO CP MOD Onawa	IA C1	173.39(107.74)	158	218.30
272	USED Onawa	IA C1	177.69(110.41)	158	210.80
273	NO CONFLICT				
274	NO CONFLICT				

\*-Short Spaced

Only listings with clearances less than 32 Km. are shown.

This study utilized a copy of the FCC FM Database as published monthly by the National Technical Information Service. D. L. Markley & Associates, Inc. believes this information to be accurate and current. However, D. L. Markley & Associates, Inc. does not assume any responsibility for any erroneous or incomplete data furnished as part of that database.

\*\*\*\*\* ANSI STANDARD REPORT FOR PROPOSED \*\*\*\*\*

Horizontal ERP= 50 kW

Vertical ERP= 50 kW

Center of radiation above ground= 133 meters

Bottom bay above ground= 127 meters

Worst case power density from C. OF RAD.= 0.1889 mW/square centimeter  
FM RADIATION IS 18.89 PERCENT OF ALLOWABLE

Worst case power density from BOTTOM BAY= 0.2071 mW/square centimeter  
FM RADIATION IS 20.71 PERCENT OF ALLOWABLE

RESTRICTED AREA begins 57.8 meters below the PROPOSED antenna bottom bay OR  
69.2 meters above ground

\*\*\*\*\* ANSI STANDARD REPORT FOR KUOO(FM) \*\*\*\*\*

Horizontal ERP= 50 kW

Vertical ERP= 50 kW

Center of radiation above ground= 155 meters

Bottom bay above ground= 146.8 meters

Worst case power density from C. OF RAD.= 0.1391 mW/square centimeter  
FM RADIATION IS 13.91 PERCENT OF ALLOWABLE

Worst case power density from BOTTOM BAY= 0.1550 mW/square centimeter  
FM RADIATION IS 15.50 PERCENT OF ALLOWABLE

RESTRICTED AREA begins 57.8 meters below the KUOO(FM) antenna bottom bay OR  
89.0 meters above ground

\*\*\*\*\* FM SUMMARY \*\*\*\*\*

Total power density from FM antennas (C. O. R.)=0.3280 mW/square centimeter  
Total power density from FM antennas (BOTTOM BAY)=0.3621 mW/square centimeter

TOTAL RADIATION FROM FM ANTENNAS (C. O. R.) IS 32.8 PERCENT OF ALLOWABLE  
TOTAL RADIATION FROM FM ANTENNAS (BOTTOM BAY) IS 36.21 PERCENT OF ALLOWABLE

NOTE: RESTRICTED AREA is defined for each individual FM antenna

**RF RADIATION EXPOSURE PREVENTION PROCEDURES**

The applicant agrees to the following measures which will assure compliance with OST Bulletin No. 65 entitled "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation". A restricted area will be established beginning at a point outside the area where the guidelines may be exceeded, either at ground level or at an elevation above ground level.

**MEASURES TAKEN TO PROTECT THE GENERAL PUBLIC:**

Appropriate measures, including the posting of warning signs which describe the nature of the hazard, will be or have been taken to preclude casual or inadvertent access to the supporting structure.

**MEASURES TAKEN TO PROTECT COMPANY EMPLOYEES AND CONTRACT LABOR:**

For personnel whose duties require them to enter the restricted area, the following procedure has been or will be instituted to ensure that exposure to RF radiation levels will not exceed the established guidelines:

The nonionizing RF levels at any particular work location will be determined through measurement to determine their exact value. The time-averaging methods described in the ANSI standard will be applied to limit exposure to working personnel, OR

If the levels are too high for such methods or if the time required to be spent inside the restricted area is larger than would be permissible by the averaging method, all emission of RF energy will cease during the work period to the extent that such RF energy would exceed the ANSI guidelines for any time period. An agreement has been or will be reached between the applicant and all other operators of transmitting facilities on the tower to cooperate by ceasing operations as necessary when work is performed on the tower.

This policy is or will be posted at the access point to the restricted area. Anyone requiring access to the restricted area who feels the duties to be performed may place them at risk of exposure to unsafe levels of RF radiation should not enter the restricted area and are to immediately contact either the General Manager or the Chief Operator.


CERTIFICATE OF SERVICE

I, DENISE A. BRANSON, secretary in the law firm of Tierney & Swift hereby certify that I have sent by first-class mail, postage prepaid, this 11th day of January, 1996, copies of the foregoing Petition For Leave To Amend to the following:

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Hearing Branch, Enforcement Division  
Mass Media Bureau  
Federal Communications Commission  
2025 M Street, N.W., Room 7212  
Washington, D.C. 20554

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Secretary